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EXAMINER

SU, SARAH

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/538,839	Applicant(s) HAYASHI ET AL.	
	Examiner Sarah Su	Art Unit 2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-9 is/are rejected.
- 7) ☒ Claim(s) 1,2,5,8 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

FINAL ACTION

1. Amendment A, received on 3 October 2008, has been entered into record. In this amendment, claims 1 and 4-9 have been amended, claims 3 and 10-16 have been cancelled.
2. Claims 1-2 and 4-9 are presented for examination.

Response to Arguments

3. Regarding the objections to the drawings, the applicant has submitted replacement sheets on 3 October 2008, and the examiner hereby withdraws the objections.
4. Regarding the objections to the claims, applicant's arguments have been fully considered but they are not persuasive. The examiner requests that elements recited in the body of a claim using the same terminology as recited in the preamble be clarified as to whether the element in the body of the claim is specifically referring to the element recited in the preamble.
5. Applicant's arguments with respect to the rejection of claims 1-2 and 4-9 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

6. Claims 1-2, 5, and 8-9 are objected to because of the following informalities:
 - a. In claim 1, line 3: "encoded image data" is unclear if it relates to "encoded image data" (claim 1, line 2);

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- b. In claim 2, line 2: "encrypted data" is unclear if it relates to "encrypted encoded image data" (claim 1, line 21);
- c. In claim 5, line 4: "encrypted encoded image data" is unclear if it relates to "encrypted encoded image data" (claim 5, line 2);
- d. In claim 8, line 3: "encoded image data" is unclear if it relates to "encoded image data" (claim 8, line 2);
- e. In claim 9, line 5: "encoded image data" is unclear if it relates to "encoded image data" (claim 9, lines 3).

Appropriate correction is required.

Drawings

- 7. The drawings were received on 3 October 2008. These drawings are acceptable.

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-2 and 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hogan (US Patent 6,047,069) in view of Lin (US 2003/0237040 A1) and Yu et al. (US 2003/0066018 A1 and Yu hereinafter).

As to claims 1, 8 and 9, Hogan discloses a system and method for preserving error correction capabilities during data encryption/decryption, the system and method having:

inputting encoded image data (col. 2, lines 12-14) and corresponding header data, wherein the header data includes first error-detecting encoding information and second error-detecting encoding information (col. 4, lines 8-15);

encrypting the inputted encoded imaged data including the error-detecting code (Abstract, lines 6-10);

outputting the encrypted encoded image data and the modified header data (col. 3, lines 31-32, 38-40).

Hogan does not disclose:

determining, based on the first error-detecting encoding information, whether the inputted encoded image data includes an error-detecting code; modifying, if the determining indicates that the inputted encoded image data includes the error-detecting code, the inputted header data, the modification including:

modifying the first error-detecting encoding information to indicate that the encoded image data does not include the error-detecting code, without removing the error-detecting code from the encoded image data, modifying the second error-detecting encoding information to indicate that the first error-detecting encoding information previously indicated that the encoded image data includes the error-detecting code.

Nonetheless, these features are well known in the art and would have been an obvious modification of the teachings disclosed by Hogan, as evidenced by Lin.

Lin discloses a system and method for intelligent error checking, the system and method having:

determining, based on the first error-detecting encoding information, whether the inputted encoded image data includes an error-detecting code
(0005, lines 6-10);

modifying, if the determining indicates that the inputted encoded image data includes the error-detecting code, the inputted header data, the modification including (0006, lines 15-18):

modifying the first error-detecting encoding information (i.e. protection bit) to indicate that the encoded image data does not include the error-detecting code, without removing the error-detecting code from the encoded image data (0006, lines 15-18).

Given the teaching of Lin, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Hogan with the teachings of Lin by modifying error-detecting encoding information to indicate the absence of error-detecting code if error-detecting code is present. Lin recites motivation by disclosing that different encoders can generate different error check fields which can erroneously produce errors (0006, lines 9-15), and that skipping the error checking process prevents incompatibility problems (0008, lines 1-4). It is obvious that the teachings of Lin would have improved the teachings of Hogan by indicating the absence of error-detecting code when it is available in order to prevent problems of incompatibility.

Hogan in view of Lin does not disclose:

modifying the second error-detecting encoding information to indicate that the first error-detecting encoding information previously indicated that the encoded image data includes the error-detecting code.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Hogan in view of Lin, as evidenced by Yu.

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Yu discloses a system and method for stopping iterative decoding in a CDMA mobile communication system, the system and method having:

modifying the second error-detecting encoding information (i.e. STOP_TURBO signal) to indicate that the first error-detecting encoding information (i.e. CRC_FLAG) previously indicated that the encoded image data includes the error-detecting code (0090, lines 33-36).

Given the teaching of Yu, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Hogan in view of Lin with the teachings of Yu by modifying error-detecting information to indicate the presence of error-detecting code. Yu recites motivation by disclosing that providing a way to stop decoding prevents unnecessary iterative decoding, reducing decoding time and power consumption despite the use of CRC bits for error correction (0032, lines 1-3, 8-13). It is obvious that the teachings of Yu would have improved the teachings of Hogan in view of Lin by modifying error-detecting information to indicate if error-detecting code is present in order to allow the stopping of decoding in order to reduce decoding time and power consumption.

As to claim 2, Hogan discloses:

a step of outputting decryption key information required to decrypt encrypted data (col. 3, lines 40-43).

As to claim 5, Hogan discloses:

inputting encrypted encoded image data (i.e. encrypted user data) and corresponding header data, wherein the header data includes first error-detecting encoding information and second error-detecting encoding information (col. 5, lines 24-29);

determining whether key information required to decrypt the inputted encrypted encoded image data is available;

decrypting, if the key information is available, the inputted encrypted encoded image data (col. 6, lines 7-10);

outputting the decrypted image data (i.e. original state) and the modified header data to an encoded image data decoding process (col. 5, lines 24-29).

Hogan does not disclose:

determining, based on the second error-detecting encoding information, whether the inputted encrypted encoded image data includes an error-detecting code;

modifying, if the second error-detecting encoding information indicates that the inputted encrypted encoded image data includes the error detecting code, the inputted header data, including modifying the first error-detecting encoding information to indicate that the inputted encrypted encoded image data includes the error detecting code.

Nonetheless, these features are well known in the art and would have been an obvious modification of the teachings disclosed by Hogan, as evidenced by Lin.

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Lin discloses:

determining, based on the second error-detecting encoding information, whether the inputted encrypted encoded image data includes an error-detecting code (0005, lines 6-10).

Given the teaching of Lin, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Hogan with the teachings of Lin by determining if error-detecting code is present. Lin recites motivation by disclosing that checking if error-detecting code is present or not allows for either the integrity of the data to be confirmed or for the frame to be decoded without error check protection so that all files can be played (0020, lines 8-11; 0021, lines 1-5). It is obvious that the teachings of Lin would have improved the teachings of Hogan by determining if error-detecting code is present so files can be played regardless if they have error checking code or not.

Hogan in view of Lin does not disclose:

modifying, if the second error-detecting encoding information indicates that the inputted encrypted encoded image data includes the error detecting code, the inputted header data, including modifying the first error-detecting encoding information to indicate that the inputted encrypted encoded image data includes the error detecting code.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Hogan in view of Lin, as evidenced by Yu.

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Yu discloses:

modifying, if the second error-detecting encoding information indicates that the inputted encrypted encoded image data includes the error detecting code, the inputted header data, including modifying the first error-detecting encoding information to indicate that the inputted encrypted encoded image data includes the error detecting code (0090, lines 33-36).

Given the teaching of Yu, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Hogan in view of Lin with the teachings of Yu by modifying the error-detecting encoding information to indicate presence of error detecting code. Please refer to the motivation recited above in respect to claims 1, 8, and 9 as to why it is obvious to apply the teachings of Yu to the teachings of Hogan in view of Lin.

As to claim 6, Hogan discloses:

a step of decrypting if the inputted encrypted encoded image data does not include the error-detecting code and the key information is available, the encrypted data without modifying the first error-detecting encoding information (col. 1, lines 24-26; col. 6, lines 7-10).

As to claim 7, Hogan does not disclose:

a step of passing, if the key information is not available, the inputted encoded image data directly to the encoded image data decoding process.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Hogan, as evidenced by Lin, combined with Yu.

Lin discloses:

a step of passing, if the key information is not available, the inputted encoded image data (i.e. data of the frame) directly to the encoded image data decoding process (0023, lines 7-8).

Given the teaching of Lin, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Hogan with the teachings of Lin by decoding data without encryption. Please refer to the motivation recited above in respect to claim 5 as to why it is obvious to apply the teachings of Lin to the teachings of Hogan.

11. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hogan in view of Lin and Yu as applied to claim 1 above, and further in view of Futenma et al. (US 2003/0091054 A1 and Futenma hereinafter).

As to claim 4, Hogan in view of Lin and Yu does not disclose:

wherein the first error-detecting encoding information is defined in the JPEG 2000 standard format and the second error-detecting encoding information is a comment defined in the JPEG 2000 standard format.

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Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Hogan in view of Lin and Yu, as evidenced by Futenma.

Futenma discloses a system and method for transmitting data in the JPEG-2000 format, the system and method having:

wherein the first error-detecting encoding information is defined in the JPEG 2000 standard format and the second error-detecting encoding information is a comment defined in the JPEG 2000 standard format (0047, lines 1-9).

Given the teaching of Futenma, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Hogan in view of Lin and Yu with the teachings of Futenma by using the JPEG 2000 format. Futenma recites motivation by disclosing that the JPEG 2000 format can achieve higher compression and definition compared to other standards and that it also has error tolerance which makes it suitable for environments where packets are lost, such as the Internet (0003, lines 12-20). It is obvious that the teachings of Futenma would have improved the teachings of Hogan in view of Lin and Yu by using the JPEG 2000 format in order to achieve higher compression and definition and allow for packet loss.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah Su whose telephone number is (571) 270-3835. The examiner can normally be reached on Monday through Friday 7:30AM-5:00PM EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sarah Su/
Examiner, Art Unit 2431

/Christopher A. Revak/
Primary Examiner, Art Unit 2431